Dear Chancellor of MIT,

My name is Jason Kim and I am currently a student of MIT. It has come to my attention that the school is looking to cut back its research funding for the current research done by Professor Tsai. I write to you this letter to ask the school to keep funding Professor Tsai’s research team. Although the information obtained by the research team is not yet widely known, it holds the potential of being one of the most important discoveries in human history, as it gives us information of how to cure Alzheimer’s disease.

Alzheimer’s disease occurs from abnormal deposits of proteins, which will cause neurons in the brain to work less efficiently. These neurons will lose the ability to function and communicate with each other, and eventually dies. This process spreads across the whole brain, which will cause the brain tissue to shrink. Even the hippocampus is affected. The life span seems to decrease if a person has the disease; people who are older than 80 years old lives for 3~4 more years, and people younger than 80 years old lives for a longer time, around 10 more years.

It is very crucial to research how Alzheimer’s disease can be cured. According to the World Health Organization (WHO), approximately 18 million people worldwide have Alzheimer’s disease, and by 2025, it is estimated that there will be 34 million people who will have the disease. Because the reason for Alzheimer’s is not identified, and the only known factor that is corresponding to Alzheimer’s is age, it can be said that every human being has the potential of getting the Alzheimer’s disease.

It is heartbreaking when realizing the affects of Alzheimer’s disease in households. People with Alzheimer’s disease lack the ability of finding words, making judgments, and memory. For example, a husband who loved his wife for 40 years might someday not recognize his wife, and might even attack her, for he does not know why a woman he doesn’t know lives in his house. A similar event happened even in my own household; one of my great aunts got the Alzheimer’s disease, and she kept on forgetting that she had a husband. Actually, she forgot her identity, and started acting as a very small infant. She would draw on the walls, she couldn’t speak normally, and she didn’t recognize anyone in her family. She used to love her family a lot, and I think they had a very happy household, but after she got Alzheimer’s, my great uncle and his son got depressed, as someone who always took care of them slowly changed into a baby-like stranger who couldn’t even remember them.

There are also changes in the behavior and personality of those who have the disease. In most cases, victims of the disease feel anger, depression, anxiety, and aggression. This is most likely because of the deterioration of brain cells that has to do with memory. Because of memory loss, the victims will feel that they are in a place he or she doesn’t know, and around people that he or she doesn’t know.

So, why fund Professor Tsai’s research team? Just recently, they found the exact gene that is responsible for the symptoms of Alzheimer’s disease in mice. They also found a drug that reverses the effects of Alzheimer’s. The gene they found was named HDAC2, and the research team found out that the HDAC2 gene has a major role in the brain’s ability to change in response to experience, which is related to memory formation. By receiving more information of this gene, there is a high possibility in the future to cure Alzheimer’s, so the research funding will not be wasted.

Please re-think about your decision of cutting back the research funding for Professor Tsai’s research team

Thank you.

January 23rd, 2013,

Jason Kim